

### **3.11 Sum & Diff. Identities (Sine & Tan) odd**

#### **answers**

1.  $\frac{\pi}{3}$

3.  $-\frac{\pi}{12}$

5.  $30^\circ - 45^\circ$  or  $300^\circ + 45^\circ$

7.  $\frac{\sqrt{2}+\sqrt{6}}{4}$

9.  $\frac{-\sqrt{3}+1}{1+\sqrt{3}} = 2 + \sqrt{3}$

11.  $\frac{\sqrt{2}-\sqrt{6}}{4}$

13.  $\sin 90^\circ = 1$

15.  $\sin\left(-\frac{7\pi}{10}\right) = -\sin\left(\frac{7\pi}{10}\right)$

17.  $\tan\left(\frac{2\pi}{15}\right)$

19.  $\frac{87}{425}$

21.  $-\sin x$

23. work is the answer

25. work is the answer

27a.  $\cos x \cos y - \sin x \sin y$

27b.  $\cos x \cos y + \sin x \sin y$